

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/784,112

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented): An anomalous shadow detection system comprising anomalous shadow detecting means for detecting a suspected anomalous shadow from image data descriptive of an inputted image according to a prescribed detection process, and image output means for outputting information including at least information identifying the detected suspected anomalous shadow, wherein

the image output means further outputs value(s) of one or more standard parameters concerning the suspected anomalous shadow together with the information including at least the information identifying the suspected anomalous shadow, wherein each of said one or more standard parameters is a parameter used for distinguishing the suspected anomalous shadow from a normal shadow, and the anomalous shadow detecting means detects the suspected anomalous shadow by judging whether a probability that a shadow detected according to the prescribed detection process is a malignant tumor is high.

2. (Original): An anomalous shadow detection system according to Claim 1, wherein the image output means is either of image display means or printing means.

3. (Original): An anomalous shadow detection system according to Claim 1, wherein the image output means further outputs certainty of detection of the suspected anomalous shadow together with the information including the information identifying the suspected anomalous shadow.

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4. (Original): An anomalous shadow detection system according to Claim 3, wherein the image output means is either of image display means or printing means.

5. (Original): An anomalous shadow detection system according to Claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, an output value of an iris filter, and malignancy/benignancy of the suspected anomalous shadow.

6. (Original): An anomalous shadow detection system according to Claim 5, wherein the image output means is either of image display means or printing means.

7. (Original): An anomalous shadow detection system according to Claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, an output value of an iris filter, and malignancy/benignancy of the suspected anomalous shadow, and wherein the image output means further outputs certainty of detection of the suspected anomalous shadow together with the information including the information identifying the suspected anomalous shadow.

8. (Original): An anomalous shadow detection system according to Claim 7, wherein the image output means is either of image display means or printing means.

9.-14. (Canceled).

15. (Currently Amended): An anomalous shadow detection system comprising anomalous shadow detecting means for detecting a ~~detects the~~ suspected anomalous shadow from image data descriptive of an inputted image according to a prescribed detection process, and

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image output means for outputting information including at least information identifying the detected suspected anomalous shadow, wherein

the image output means further outputs certainty of detection of the suspected anomalous shadow together with the information including the information identifying the suspected anomalous shadow, ~~and the anomalous shadow detecting means detects the suspected anomalous shadow, and the anomalous shadow detecting means detects the suspected anomalous shadow,~~ and the anomalous shadow detecting means detects the suspected anomalous shadow by judging whether a probability that a shadow detected according to the prescribed detection process is a malignant tumor is high.

16. (Original): An anomalous shadow detection system according to Claim 15, wherein the image output means is either of image display means or printing means.

17. (Currently Amended): An anomalous shadow detection system according to any one of Claims 1-8, and ~~11-16~~ 15-16, wherein the information identifying the suspected anomalous shadow is either of an image of the suspected anomalous shadow or numerical data descriptive of a position, morphology or size of the suspected anomalous shadow.

18. (Previously Presented): An anomalous shadow detection system according to Claim 1, wherein the anomalous shadow detecting means detects the suspected anomalous shadow by judging whether the probability that the shadow detected according to the prescribed detection process is the malignant tumor is high, prior to the image output means outputting information including the at least information identifying the detected suspected anomalous shadow.

19. (Previously Presented): An anomalous shadow detection system according to Claim 15, wherein the anomalous shadow detecting means detects the suspected anomalous shadow by

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judging whether the probability that the shadow detected according to the prescribed detection process is the malignant tumor is high, prior to the image output means outputting information including the at least information identifying the detected suspected anomalous shadow.

20. (new): An anomalous shadow detection system according to claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, and an output value of an iris filter.

21. (new): An anomalous shadow detection system according to claim 1, wherein the anomalous shadow detecting means comprises one of an iris filter and a morphology filter.

22. (new): An anomalous shadow detection system according to claim 21, wherein the anomalous shadow detecting means comprises the iris filter, and the anomalous shadow detecting means further conducts a shape analysis on geometric features of the suspected anomalous shadow.

23. (new): An anomalous shadow detection system according to claim 21, wherein the anomalous shadow detecting means comprises the morphology filter for detecting a suspected microcalcification shadow.